DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES DIRECTOR'S OFFICE

OCCUPATIONAL HEALTH STANDARDS

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(By authority conferred on the director of the department of consumer and industry services by sections 14 and 24 of 1974 PA 154 and Executive Reorganization Orders Nos. 1996-1 and 1996-2, MCL 408.1014, 408.1024, 330.3101, and 445.2001)

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PART 601. AIR CONTAMINANTS FOR CONSTRUCTION

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R 325.60151 Construction air contaminants.

- Rule 1. (1) An employer shall ensure that employee exposures to inhalation, ingestion, skin absorption, or contact with any material or substance at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970" of the American Conference of Governmental Industrial Hygienists, as listed in R325.60154 to R 325.60161, are avoided.
- (2) To achieve compliance with subrule (1) of this rule, an employer shall ensure that administrative or engineering controls are implemented whenever feasible. If administrative or engineering controls are not feasible to achieve full compliance, then protective equipment or other protective measures shall be used to keep the exposure of employees to air contaminants within the limits prescribed in this rule. Any equipment and technical measures used for this purpose shall first be approved for each particular use by a competent industrial hygienist or other technically qualified person. Respirators shall be used in a manner that is in compliance with R 325.60051 et seg., Part 451. respiratory protection.
- (3) R 325.51401 et seq., Part 302. vinyl chloride, of the MIOSHA Occupational Health Standards for General Industry applies to the exposure of every employee to vinyl chloride in every employment and place of employment covered by these rules in place of

any different standard on exposure to vinyl chloride that would otherwise be applicable by virtue of subrule (1) of this rule.

- (4) These rules replace O.H. rule 6201.
- (5) The "Threshold Limit Values (TLV) of the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.) for 1970" appear R 325.60153 to R 325.60161. The Threshold Limit Values identified in these administrative rules as Maximum Allowable Concentrations (MAC) are specified in the rules that follow.

R 325.60152 Definitions pertaining to contaminants. Rule 2. As used in these rules:

- (a) "Maximum allowable concentration" or "MAC" means the threshold limit value or the timeweighted average 8-hour airborne concentration of a contaminant to which a person may be safely exposed.
- (b) "Mg/m³" means milligrams of particulate per cubic meter of air.
- (c) "Mppcf" means millions of particulates per cubic foot of air based on impinger samples counted by light field microscopic techniques.
- (d) "Non-respirable atmosphere" means an atmosphere which contains insufficient oxygen, or an elevated level of contaminants which may render a person incapable of self-rescue.

- (e) "**Ppm**" means parts of vapor or gas per million parts of air by volume at 25 degrees Celsius and 760 millimeters of mercury pressure.
- (f) "Source" means a process or equipment that releases a contaminant into the air in concentrations exceeding the MAC.

R 325.60153 Contaminants; exposures; MAC.

- **Rule 3.** (1) An employer shall not allow an employee to be exposed to a contaminant at concentrations in excess of the MAC as listed in R 325.60154 to R 325.60161.
- (2) An employer shall not allow an employee to be exposed to a contaminant or combination of contaminants in concentrations that are hazardous or injurious to the person's health.

R 325.60154 Maximum allowable concentrations.

Rule 4. (1) Maximum allowable concentrations of air contaminants based on a repeated 8-hour work day

- exposure are listed in tables 1 to 7 in R 325.60155 to R 325.60161.
- (2) A substance in tables 1 to 6 that is preceded by the letter A, C, or S is an especially hazardous contaminant and all the following precautions shall be taken:
- (a) If the substance is preceded by the letter "A", then an employer shall ensure that an employee or any part of an employee's anatomy is not exposed to, or allowed to come in contact with, the substance by means of any respiratory, oral, or skin route.
- (b) If the substance is preceded by the letter "C", then its MAC means the highest concentration at which an employer may allow a person to be exposed at any time. This concentration is commonly referred to as a "ceiling."
- (c) If the substance is preceded by the letter "S", then an employer shall ensure that precautions are taken to prevent skin absorption.

R 325.60155 Maximum allowable concentrations for substances; A and B.

MAC

Rule 5. Table 1. Substances A and B

Subs	stance	ppm	mg/m ³
	Abate		15
	Acetaldehyde	200	360
	Acetic acid	10	25
	Acetic anhydride	5	20
	Acetone	1,000	2,400
	Acetonitrile	40	70
	Acetylene	Iner	t gas
	Acetylene dichloride, see 1,2-Dic	hloroeth	nylene
	Acetylene tetrabromide	1	14
	Acrolein	0.1	0.25
S	Acrylamide		0.3
S S S	Acrylonitrile (see R 325.51501 et	seq.*)	
S	Aldrin		0.25
S	Allyl alcohol	2	5
	Allyl chloride	1	3
С	Allyl glycidyl ether (AGE)	10	45
	Allyl propyl disulfide	2	12
	Alundum, (Al ₂ 0 ₃)		t dust
	2-Aminoethanol, see Ethanolami		
	2-Aminopyridine	0.5	2
	Ammonia	50	35
	Ammonium sulfamate (amate)		15
	n-Amyl acetate	100	525
	sec-Amyl acetate	125	650
S S	Aniline	5	19
S	Anisidine (o,p-isomers)		0.5
	Antimony & compounds (as Sb)		0.5
	ANTU (alpha naphthyl thiourea)		0.3
	Argon	Iner	t gas
	Arsenic, inorganic compounds		
	(see R 325.51601 et seq.*)		
	Arsenic, organic compounds		
	(as As)		0.5

		М	AC
Subs	stance	ppm	mg/m ³
	Arsine	0.05	0.2
S	Azinphos-methyl		0.2
	Barium (soluble compounds)		0.5
S,C	Benzene (benzol) (see R 325.771	01 et s	seq.*)
A,S	Benzidine		
	p-Benzoquinone, see Quinone		
	Benzoyl peroxide		5
	Benzyl chloride	1	5
	Beryllium		0.002
	Biphenyl, see Diphenyl		
	Bisphenol A, see Diglycidyl ether		
	Boron oxide		15
	Boron tribromide	1	10
С	Boron trifluoride	1	3
	Bromine	0.1	0.7
	Bromine pentafluoride	0.1	0.7
S	Bromoform	0.5	5
	Butadiene (1,3-butadiene)		
	(see R 325.50091 et seq.*)		
	Butanethiol, see Butyl mercaptan		
	2-Butanone	200	590
S	2-Butoxy ethanol (butyl cellosolve)		240
	Butyl acetate (n-butyl acetate)	150	710
	sec-Butyl acetate	200	950
	tert-Butyl acetate	200	950
	Butyl alcohol	100	300
	sec-Butyl alcohol	150	450
	tert-Butyl alcohol	100	300
S,C	Butylamine	5	15
S,C	tert-Butyl chromate (as Cr0 ₃)		0.1
	n-Butyl glycidyl ether (BGE)	50	270
	Butyl mercaptan	0.5	1.5
	p-tert-Butyltoluene	10	60

Substance

Copper fume

Dusts and mists

Corundum (Al₂0₃)

Cotton dust (raw)

MAC ppm mg/m³

Inert dust

0.1

Α	See R 325.60154(2).
С	See R 325.60154(2).
S	See R 325.60154(2).

Caution--these rules contain extensive requirements for exposure to these substances.

P 325 60156 Maximum allowable concentrations

					Cotton dust (raw)		1
R 325	5.60156 Maximum allowable cor	ncentra	tions		Crag® herbicide		15
	ubstances; C and D.			S	Cresol (all isomers)	5	22
	Rule 6. Table 2. Substances C	and D			Crotonaldehyde	2	6
	ruio di Table I. Gazdianese e		AC	S	Cumene	50	245
Subs	tance	ppm	mg/m ³	S	Cyanide (as CN)		5
Oubs	Cadmium (metal dust and soluble		9/		Cyanogen	10	
	(see R 325.51851 et seq.*)	Jantoj			Cyclohexane	300	1,050
С	Cadmium oxide fume (as Cd)				Cyclohexanol	50	200
C	(see R 325.51851 et seq.*)				Cyclohexanone	50	200
	Calcium arsenate		1		Cyclohexene	300	1,015
	Calcium carbonate	Inor	t dust		Cyclopentadiene	75	200
	Calcium oxide		5 5		2,4-D		10
		2		S	DDT (Dichlorodiphenyl-		
	Camphor (synthetic)				trichloroethane)		1
	Carbary (Sevin®)		5		DDVP, see Dichlorvos		•
	Carbon black	 F 000	3.5	S	Decaborane	0.05	0.3
0	Carbon dioxide	5,000	9,000	S	Demeton®		0.1
S	Carbon disulfide	20	60	O	Diacetone alcohol (4-hydroxy-		0.1
0.0	Carbon monoxide	50	55		4-methyl-2-pentanone)	50	240
S,C	Carbon tetrachloride	10	65		1,2-Diainoethane, see Ethylene		240
_	Cellulose (paper fiber)	Iner	t dust		Diazomethane	0.2	0.4
S	Chlordane		0.5		Diborane	0.2	0.4
S	Chlorinated camphene		0.5	S C		0.1	0.1
	Chlorinated diphenyl oxide		0.5	S,C	1,2-Dibromoethane (ethylene	OF.	100
	Chlorine	1	3		dibromide)	25	190
	Chlorine dioxide	0.1	0.3		Dibutyl phosphate	1	5
С	Chlorine trifluoride	0.1	0.4	0	Dibutyl phthalate		5
С	Chloroacetaldehyde	1	3	C C	Dichloroacetylene	0.1	0.4
	alpha-Chloroacetophenone			C	o-Dichlorobenzene	50	300
	(phenacylchloride)	0.05	0.3		p-Dichlorobenzene	75	450
	Chlorobenzene				Dichlorodifluoromethane	1,000	4,950
	(monochlorobenzene)	75	350		1,3-Dichloro-5,5-dimethyl		
	o-Chlorobenzylidene				hydantoin		0.2
	malononitrile (OCBM)	0.05	0.4		1,1-Dichloroethane	100	400
	Chlorobromomethane	200	1,050		1,2-Dichloroethane	50	200
	2-Chloro-1,3-butadiene, see Chlo	roprene	Э		1,2-Dichloroethylene	200	790
S	Chlorodiphenyl (42% Chlorine)	· 	1	S,C	Dichloroethyl ether	15	90
S	Chlorodiphenyl (54% Chlorine)		0.5		Dichloromethane, see Methylene	e chloride	е
	1-Chloro-2,3-epoxypropane, see	Epichlo	rohvdrin		Dichloromonofluoromethane	1,000	4,200
	2-Chloroethanol, see Ethylene ch			С	1,1-Dichloro-1-nitroethane	10	60
	Chloroethylene, see Vinyl chlorid				1,2-Dichloropropane, see Propy	lene dich	loride
С	Chloroform (trichloromethane)	50	240		Dichlorotetrafluoroethane	1,000	7,000
_	1-Chloro-1-nitropropane	20	100	S	Dichlorvos (DDVP)		1
	Chloropicrin	0.1	0.7	S	Dieldrin		0.25
S	Chloroprene		•		Diethylamine	25	75
Ü	(2-chloro-1,3-butadiene)	25	90	S	Diethylamino, ethanol	10	50
	Chromic acid and	20	00	S,C	Diethylene triamine	10	42
	chromates (as Cr0 ₃)		0.1		Diethyl ether, see Ethyl ether		
	Chromium, sol. chromic		0.1		Difluorodibromomethane	100	860
	& chromous salts (as Cr)		0.5	С	Diglycidyl ether (DGE)	0.5	2.8
	Metal & insol. salts		1		Dihydroxybenzene, see Hydroqu		
	Coal tar pitch volatiles (benzene		ı		Diisobutyl ketone	50	290
	soluble fraction: anthracene, B	aD		S	Diisopropylamine	5	20
				-	Dimethoxymethane, see Methyla		-
	phenanthrene, acridine, chrysen	i c ,	0.2	S	Dimethyl acetamide	10	35
	pyrene) Cobalt, metal fume & dust		0.2 0.1	•	Dimethylamine	10	18
		50101			Dimethylaminobenzene, see Xyl		
	Coke oven emissions (see R 325	.50101	er seq.)		2,		

Substance

Ethylene chlorohydrin

		M	AC
Subs	stance	ppm	mg/m³
S	Dimethylaniline		
	(N-dimethylaniline)	5	25
	Dimethylbenzene, see Xylene		
	Dimethyl-1,2-dibromo-2,2-dichlo	roethyl	
	phosphate (Dibrom®)		3
S	Dimethylformamide	10	30
	2,6-Dimethylheptanone, see Diis	sobutyl k	etone
S	1,1-Dimethylhydrazine	0.5	1
	Dimethylphthalate		5
S	Dimethylsulfate	1	5
S	Dinitrobenzene (all isomers)		1
S S	Dinitro-o-cresol		0.2
S	Dinitrotoluene		1.5
S	Dioxane (diethylene dioxide)	100	360
	Diphenyl	0.2	1
	Diphenyl amine		10
	Diphenylmethane diisocyanate,		
	see Methylene bisphenyl isocy	anate (N	IDI)
S	Dipropylene glycol methyl ether	100	600
	Di-sec, octyl phthalate		
	(di-2-ethylhexylphthalate)		5
	A See R 325.60154(2).	
	C See R 325.60154(2		
	S See R 325.60154(2	•	
*	Cautionthese rules contain exte	ensive	

 Caution--these rules contain extensive requirements for exposure to these substances.

R 325.60157 Maximum allowable concentrations for substances; E to H.

Rule 7. Table 3. Substances E to H

		M	AC
Subs	stance	ppm	mg/m³
	Emery	Iner	t dust
S	Endosulfan (Thiodan®)		0.1
S	Endrin		0.1
S S S	Epichlorohydrin	5	19
S	EPN		0.5
	1,2-Epoxypropane, see Propylene	oxide	
	2,3-Epoxy-1-propanol, see Glycid	ol	
	Ethane	Iner	t gas
	Ethanethiol, see Ethyl mercaptan		_
	Ethanolamine	3	6
S	2-Ethoxyethanol	200	740
S	2-Ethoxyethylacetate		
	(cellosolve acetate)	100	540
	Ethyl acetate	400	1,400
S	Ethyl acrylate	25	100
	Ethyl alcohol (ethanol)	1,000	1,900
	Ethylamine	10	18
	Ethyl sec-amyl ketone		
	(5-methyl-3-heptanone)	25	130
	Ethyl benzene	100	435
	Ethyl bromide	200	890
	Ethyl butyl ketone (3-heptanone)	50	230
	Ethyl chloride	1,000	2,600
	Ethyl ether	400	1,200
	Ethyl formate	100	300
	Ethyl mercaptan	0.5	1
	Ethyl silicate	100	850
	Ethylene	Iner	t gas

O	Ethylenediamine	10	25
	Ethylene dibromide, see 1,2-Dibro		
	Ethylene dichloride, see 1,2-Dichl		
S,C	Ethylene glycol dinitrate and/or	oroerra	al IC
3,0		0.0	
	Nitroglycerin	0.2	_
	Ethylene glycol monomethyl ethe	r acetat	:е,
_	see Methyl cellosolve acetate		
S	Ethyleneimine	0.5	1
	Ethylene oxide (see R 325.51151		
	Ethylidine chloride, see 1,1-Dichlo	oroetha	ne
S	N-Ethylmorpholine	20	94
	Ferbam		15
	Ferrovanadium dust		1
	Fibrous glass	Iner	t dust
	Fluoride (as F)		2.5
	Fluorine	0.1	0.2
	Fluorotrichloromethane	1,000	5,600
С	Formaldehyde (see R 325.51451	et seq.	
	Formic acid	5	´ 9
S	Furfural	5	20
	Furfuryl alcohol	50	200
	Gasoline (limits will be based on a		
	hydrocarbons in mixture)		
	Glycerine mist	Iner	t mist
	Glycidol (2,3-epoxy-1-propanol)	50	150
	Glycol monoethyl ether, see 2-Eth	noxveth	anol
	Graphite (synthetic)	-	t dust
	Guthion®, see Azinphos-methyl		
	Gypsum	Iner	t dust
	Hafnium		0.5
	Helium	Iner	t gas
S	Heptachlor		0.5
	Heptane (n-heptane)	500	2,000
S	Hexachloroethane	1	10
S	Hexachloronaphthalene		0.2
	Hexane (n-hexane)	500	1,800
	2-Hexanone	100	410
	Hexone (methyl isobutyl ketone)	100	410
	sec-Hexyl acetate	50	300
S	Hydrazine	1	1.3
Ū	Hydrogen	-	t gas
	Hydrogen bromide	3	10
С	Hydrogen chloride	5	7
S	Hydrogen cyanide	10	, 11
O	Hydrogen fluoride	3	2
	Hydrogen peroxide	1	1.4
	Hydrogen selenide	0.05	0.2
	Hydrogen sulfide	10	15
	Hydroquinone		2
			¬
	A See R 325.60154(2).		
	C See R 325.60154(2). S See R 325.60154(2).		
*	()		
^	Cautionthese rules contain exter		4
	requirements for exposure to thes	se subs	tances.

MAC ppm mg/m³

16

5

R 325.60158 Maximum allowable concentrations for substances; I to \mathbf{M} .

Rule 8. Table 4. Substances I to M

		М	5 AC			M	AC
Sub	stance		mg/m ³	Subs	stance		mg/m ³
Sub	Indene	ppm 10	45	Subs	Methyl formate	ppm 100	250
	Indium and compounds (as In)		0.1	S	Methyl iodide	5	28
С	lodine	0.1	1	J	Methyl isoamyl ketone	100	475
O	Iron oxide fume		10	S	Methyl isobutyl carbinol	25	100
	Iron salts, soluble (as Fe)		1	J	Methyl isobutyl ketone, see He		100
	Isoamyl acetate	100	525	S	Methyl isocyanate	0.02	0.05
	Isoamyl alcohol	100	360	Ü	Methyl mercaptan	0.5	1
	Isobutyl acetate	150	700		Methyl methacrylate	100	410
	Isobutyl alcohol	100	300		Methyl propyl ketone, see 2-Pe		-
	Isophorone	25	140	С	Methyl silicate	5	30
	Isopropyl acetate	250	950	С	alpha-Methyl styrene	100	480
	Isopropyl alcohol	400	980	С	Methylene bisphenyl isocyanat	:e	
	Isopropylamine	5	12		(MDI)	0.02	0.2
	Isopropyl ether	500	2,100		Methylene chloride (dichlorome	ethane)	
	Isopropyl glycidyl ether (IGE)	50	240		(see R 325.51651 et seq.*)		
	Kaolin	Iner	t dust		Molybdenum (soluble compou	nds)	5
	Ketene	0.5	0.9		(insoluble compounds)		15
	Lead and lead compounds			S	Monomethyl aniline	2	9
	(see R 325.51991 et seq.*)			S,C	Monomethyl hydrazine	0.2	0.35
	Limestone	Iner	t dust	S	Morpholine	20	70
S	Lindane		0.5		A See R 325.60154	(2).	
	Lithium hydride		0.025		C See R 325.60154		
	L.P.G. (liquified petroleum gas)	1,000	1,800		S See R 325.60154	(2).	
	Magnesite	Iner	t dust	*	Cautionthese rules contain ex	xtensive	
	Magnesium oxide fume	15			requirements for exposure to t		tances.
S	Malathion		15		·		
_	Maleic anhydride	0.25	1	R 32	5.60159 Maximum allowable of	concentra	tions
С	Manganese and compounds		_	for s	substances; N to P.		
	(as Mn)		5		Rule 9. Table 5. Substances	N to P	
	Marble	Inor	t dust				
_		11101				IVI	AC î
S	Mercury		0.1	Subs	stance	ppm	AC mg/m ³
S S	Mercury Mercury (organic compounds)		0.1 0.01	Subs	Naphtha (coal tar)	ppm 100	mg/m³ 400
S S	Mercury Mercury (organic compounds) Mesityl oxide	 25	0.1 0.01 100	Subs	Naphtha (coal tar) Naphtha (petroleum)(MAC will	ppm 100 be based	mg/m³ 400
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane	 25 Iner	0.1 0.01	Subs	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix	ppm 100 be based cture)	mg/m³ 400 on
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl merca	 25 Iner ptan	0.1 0.01 100 t gas		Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene	ppm 100 be based	mg/m³ 400
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl merca Methoxychlor	 25 Iner ptan 	0.1 0.01 100 t gas	Subs A	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine	ppm 100 be based cture) 10 	mg/m³ 400 on 50
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl merca Methoxychlor 2-Methoxyethanol, see Methyl ce	 25 Iner ptan ellosolve	0.1 0.01 100 t gas		Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon	ppm 100 be based (ture) 10 Iner	mg/m³ 400 on 50
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl co Methyl acetate	 25 Iner ptan ellosolve 200	0.1 0.01 100 t gas 15		Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl	ppm 100 be based (ture) 10 Iner 0.001	mg/m³ 400 on 50
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl compounds Methyl acetate Methyl acetylene (propyne)	 25 Iner ptan ellosolve 200 1,000	0.1 0.01 100 t gas		Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp	ppm 100 be based (ture) 10 Iner 0.001	mg/m ³ 400 on 50 t gas 0.007
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl co Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix	 25 Iner ptan ellosolve 200 1,000 xture	0.1 0.01 100 t gas 15 610 1,650	A	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble compass (as Ni)	ppm 100 be based (ture) 10 Iner 0.001 pounds	mg/m ³ 400 on 50 t gas 0.007
S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl co Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP)	 25 Iner ptan ellosolve 200 1,000 xture 1,000	0.1 0.01 100 t gas 15 610 1,650		Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine	ppm 100 be based sture) 10 Iner 0.001 counds	mg/m ³ 400 on 50 t gas 0.007 1 0.5
S S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl ca Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate	 25 Iner ptan ellosolve 200 1,000 xture 1,000	0.1 0.01 100 t gas 15 610 1,650 1,800 35	A	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid	ppm 100 be based (ture) 10 Iner 0.001 counds 2	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5
S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl compound Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane)	25 Iner ptan ellosolve 200 1,000 xture 1,000 10 1,000	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100	A S	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid Nitric oxide	ppm 100 be based (ture) 10 Iner 0.001 counds 2 25	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30
S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl compounds Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane) Methyl alcohol (methanol)	25 Iner ptan ellosolve 200 1,000 xture 1,000 10 1,000 200	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260	A S S	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid Nitric oxide p-Nitroaniline	ppm 100 be based (ture) 10 Iner 0.001 counds 2 25 1	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6
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S S,C S,S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl composition Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane) Methyl alcohol (methanol) Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl bromide Methyl butyl ketone, see 2-Hexal	25 Iner ptan ellosolve 200 1,000 xture 1,000 200 10 isobutyl 100 20 none	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol	A S S S	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid Nitric acid Nitric oxide p-Nitroaniline Nitrobenzene p-Nitrochlorobenzene Nitrogen Nitrogen dioxide Nitrogen trifluoride Nitroglycerin	ppm 100 be based (ture) 10 Iner 0.001 bounds 2 25 1 1 100 Iner 5 10	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2
s s s,c s	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl compounds Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane) Methyl alcohol (methanol) Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl butyl ketone, see 2-Hexal Methyl cellosolve	25 Inerptan ellosolve 200 1,000 xture 1,000 10 1,000 200 10 isobutyl 100 20 none 25	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol 465 80	A S SSS	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble compassion (as Ni) Nicotine Nitric acid Nitric acid Nitric oxide p-Nitroaniline Nitrobenzene p-Nitrochlorobenzene Nitrogen Mitrogen dioxide Nitrogen trifluoride Nitroglycerin Nitromethane	ppm 100 be based sture) 10 Iner 0.001 bounds 2 25 1 1 100 Iner 5 10 0.2 100	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2 250
S S,C S,S	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl ce Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane) Methyl alcohol (methanol) Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl bromide Methyl butyl ketone, see 2-Hexal Methyl cellosolve Methyl chloride Methyl chloroform	25 Iner ptan ellosolve 200 1,000 xture 1,000 10 1,000 200 10 isobutyl 100 20 none 25 25	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol 465 80	A S SSS	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble compassion (as Ni) Nicotine Nitric acid Nitric acid Nitric acid Nitrobenzene p-Nitrochlorobenzene p-Nitrochlorobenzene Nitrogen Nitrogen dioxide Nitrogen trifluoride Nitroglycerin Nitromethane 1-Nitropropane	ppm 100 be based sture) 10 Iner 0.001 bounds 2 25 1 1 100 Iner 5 10 0.2 100 25	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2 250 90
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s s,c s,c	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl composition Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane) Methyl alcohol (methanol) Methyl alcohol (methanol) Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl bromide Methyl butyl ketone, see 2-Hexal Methyl cellosolve Methyl cellosolve acetate Methyl chloride Methyl chloroform Methylcyclohexane Methylcyclohexanol	25 Iner ptan 200 1,000 xture 1,000 200 10 isobutyl 100 20 none 25 25 100 350 500 100	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol 465 80 80 120 210 1,900 2,000 470	A S SSS	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble compassion (as Ni) Nicotine Nitric acid Nitric acid Nitric acid Nitric oxide p-Nitroaniline Nitrobenzene p-Nitrochlorobenzene Nitrogen Nitrogen dioxide Nitrogen dioxide Nitroglycerin Nitromethane 1-Nitropropane 2-Nitropropane N-Nitrosodimethylamine	ppm 100 be based sture) 10 Iner 0.001 bounds 2 25 1 1 100 Iner 5 10 0.2 100 25	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2 250 90
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s s,c s,c	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl composition Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyla (dimethoxymethane) Methylal (dimethoxymethane) Methyl alcohol (methanol) Methylamine Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl bromide Methyl bromide Methyl butyl ketone, see 2-Hexal Methyl cellosolve Methyl cellosolve Methyl chloride Methyl chloride Methyl chloroform Methylcyclohexane Methylcyclohexanol o-Methylcyclohexanone Methylenedianiline (MDA)	25 Iner ptan 200 1,000 xture 1,000 200 10 isobutyl 100 20 none 25 25 100 350 500 100	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol 465 80 80 120 210 1,900 2,000 470	A S S S S,A	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid Nitric acid Nitric acid Nitric acid Politrochlorobenzene politrochlorobenzene politrochlorobenzene Nitrogen Mitrogen dioxide Nitroglycerin Nitromethane 1-Nitropropane 2-Nitrosodimethylamine (dimethylnitrosomine) Nitrotoluene	ppm 100 be based (ture) 10 Iner 0.001 counds 2 25 1 1 100 Iner 5 10 0.2 100 25 25	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2 250 90 90
s s,c s,c	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl composition Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyl acrylate Methylal (dimethoxymethane) Methyl alcohol (methanol) Methyl alcohol (methanol) Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl bromide Methyl butyl ketone, see 2-Hexal Methyl cellosolve Methyl cellosolve acetate Methyl chloride Methyl chloride Methyl chloroform Methylcyclohexane Methylcyclohexanol o-Methylcyclohexanone Methylenedianiline (MDA) (see R 325.51651 et seq.*)	25 Iner ptan ellosolve 200 1,000 xture 1,000 200 10 isobutyl 100 20 none 25 100 350 500 100 100	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol 465 80 80 120 210 1,900 2,000 470 460	A S S S S,A	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid Nitric acid Nitric acid Politrochlorobenzene p-Nitrochlorobenzene p-Nitrochlorobenzene Nitrogen Nitrogen dioxide Nitrogen trifluoride Nitroglycerin Nitromethane 1-Nitropropane 2-Nitrosodimethylamine (dimethylnitrosomine)	ppm 100 be based cture) 10 Iner 0.001 counds 2 25 1 1 100 Iner 5 10 0.2 100 25 25 5 oropicrin	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2 250 90 90
s s,c s,c	Mercury Mercury (organic compounds) Mesityl oxide Methane Methanethiol, see Methyl mercal Methoxychlor 2-Methoxyethanol, see Methyl composition Methyl acetate Methyl acetylene (propyne) Methyl acetylene-propadiene mix (MAPP) Methyla (dimethoxymethane) Methylal (dimethoxymethane) Methyl alcohol (methanol) Methylamine Methyl amyl alcohol, see Methyl Methyl (n-amyl) ketone (2-heptanone) Methyl bromide Methyl bromide Methyl butyl ketone, see 2-Hexal Methyl cellosolve Methyl cellosolve Methyl chloride Methyl chloride Methyl chloroform Methylcyclohexane Methylcyclohexanol o-Methylcyclohexanone Methylenedianiline (MDA)	25 Iner ptan ellosolve 200 1,000 xture 1,000 200 10 isobutyl 100 20 none 25 100 350 500 100 100	0.1 0.01 100 t gas 15 610 1,650 1,800 35 3,100 260 12 carbinol 465 80 80 120 210 1,900 2,000 470 460	A S S S S,A	Naphtha (coal tar) Naphtha (petroleum)(MAC will aromatic hydrocarbons in mix Naphthalene beta-Naphthylamine Neon Nickel carbonyl Nickel, metal and soluble comp (as Ni) Nicotine Nitric acid Nitric acid Nitric acid Nitric oxide p-Nitroaniline Nitrobenzene p-Nitrochlorobenzene Nitrogen Mitrogen dioxide Nitrogen dioxide Nitrogen trifluoride Nitroglycerin Nitromethane 1-Nitropropane 2-Nitropropane N-Nitrosodimethylamine (dimethylnitrosomine) Nitrotoluene Nitrotrichloromethane, see Chl	ppm 100 be based cture) 10 Iner 0.001 counds 2 25 1 1 100 Iner 5 10 0.2 100 25 25 5 oropicrin	mg/m ³ 400 on 50 t gas 0.007 1 0.5 5 30 6 5 1 310 t gas 9 29 2 250 90 90 30

Substance ppm mg/m² 400 1,900			R.A.	1		D 22	5 CO4CO Maximum allawahla aan		4iana
Octane Oil mist, vapor (MAC will be based on aromatic hydrocarbons in misture) Osmium tetroxide Oxalic acid	Subs	stance						centra	tions
Oil mist, particulate Oil mist, vapor (MAC will be based on aromatic hydrocarbons in mixture) Osmium tertoxide Osmium	Subs	_			1	101 5) to 7	
Oil mist, vapor (MAC will be based on aromatic hydrocarbons in mixture)							raic 10. Table 0. Cubstances c		AC
hydrocarbons in mixture Osmiru tetroxide		•	d on ar	_	9	Subs	stance		
Osmium tetroxide			.						0.4
Oxygen diffuoride				0.002	5	S	RDX		
Oxygen diffluoride		Oxalic acid		1			Rhodium, metal fume, dusts, and	insolub	ole
S		Oxygen difluoride	0.05	0.1					
S Parathion			0.1	0.2			Rhodium, soluble compounds		
Pentaborane		Paraquat		0.5			(as Rh)		0.001
S Pentachloronaphthalene — 0.5 Rouge Inert outs S Pentachlorophenol — 0.5 Selenium compounds (as Se) — 0.2 Pentacythritol Inert particulate Selenium compounds (as Se) — 0.2 Perchlarone 200 700 Selenium hexafluoride 0.05 0.4 Perchloroethyl mercaptan 0.1 0.8 Silicon carbide Inert dust S Perchloryl fluoride 3 13.5 Sodium fluoroacetate (1080) — 0.1 Phenolyl fluoride 3 13.5 Sodium fluoroacetate (1080) — 0.05 S Phenol fluored idamine — 0.1 Tole Starch Inert dust S Phenyl ether (vapor) 1 7 C Styrene Stoddard solvent 200 1,150 S Phenyl ether (vapor) 1 7 C Styrene monomer Phenyl ether (vapor) 1 7 C Styrene monomer	S	Parathion							
Selenium compounds (as Se) 0.2 Pentare pentare 500 1.500 1.500 Perchloromethylene 200 700 Perchloromethyl mercaptan 0.1 0.8 0.3 Perchloromethyl mercaptan 0.1 0.8 0.3 Perchloromethyl mercaptan 0.1 0.8 0.5 Phernyl ether bydrocarbons in mixture) 0.1 0.5 Phenyl ether (vapor) 1 7 7 7 7 7 7 7 7 7			0.005				· ·		5
Pentareythrifol nert particulate Pentare 500 1,500 2,-Pentare 500 1,500 2,-Pentare 500 1,500 5,000 1,150 5,000 1,150 5,000 1,150 5,000 1,150 1,	S							Iner	
Pentane 500 1,500	S								
2-Perntanone		-							
Perchloromethylene								Iner	t dust
Perchloromethyl mercaptan 0.1 0.8 Perchloromethyl fluoride 3 3.5 Sodium fluoroacetate (1080) 0.05 Perchlorom distillates (naphtha)(MAC will be based on aromatic hydrocarbons in mixture) 5 Phenol 5 19 Stoddard solvent 200 1,150									0.04
Perchloryl fluoride		•			,	_			
Petroleum distillates (naphtha)(MAC will be based on aromatic hydrocarbons in mixture) Stibine 0.1 0.5					•	S			
based on aromatic hydrocarbons in mixture S Phenol Phenol 5 19 Stodard solvent 200 1,150 S Phenyl ether (vapor) 1 7 C Styrene monomer (phenyl ether-biphenyl mixture (vapor) 1 7 T Styrene monomer (phenylethylene) 100 420								 lnor	
S		`							
P-Phenyl ether (vapor)	9								
Phenyl ether (vapor)			-						
Phenyl ether-biphenyl mixture (vapor)	3	•			(_	•		0.15
(vapor) 1 7 Sucrose Inert dust Phenylethylene, see Styrene Phenyl glycidyl ether (PGE) 10 60 Sulfur dioxide 5 13 Phenyl plycidyl ether (PGE) 10 60 Sulfur hexaffluoride 1,000 6,000 S Phosdrin (Mevinphos®) 0.1 Sulfur monochloride 1 6 Phosphore (carbonyl chloride) 0.1 0.4 Sulfur monochloride 0.025 0.25 Phosphoric acid 1 Sulfur phaseffluoride 0.025 0.25 Phosphorus (yellow) 0.1 Systox, see Demeton® 2,4,5T 1 Phosphorus pentasulfide 1 Tantalum 5 20 Phosphorus pentasulfide 1 Tellon® decomposition products (maintain minimal air concentration) 0.2 Picric acid 0.1 Tellon® decomposition products (maintain minimal air concentration) 0.1 Pitatinum, soluble salts (as Pt) <			'	,	`	C	•	100	420
Phenylethylene, see Styrene			1	7					
Phenyl glycidyl ether (PGE)		· · ·	•	•					
Phenylhydrazine 5 22 Sulfuric acid 1			10	60				-	
Phosdrin (Mevinphos®) 0.1	S								
Phospene (carbonyl chloride 0.1				0.1			Sulfur monochloride	1	6
Phosphoric acid 1 Systox, see Demeton® 10 Phosphorus (yellow) 0.1 2,4,5T 10 Phosphorus pentasulfide 1 STEDP 0.2 Phosphorus trichloride 0.5 3 Teffon® decomposition products (maintain minimal air concentration) 0.2 Picric acid 0.1 Tellurium 0.1 Platinum, soluble salts (as Pt) 0.01 Tellurium hexafluoride 0.02 0.2 Polytetrafluoroethylene decomposition products see Teflon® decomposition products see Teflon® decomposition products 1,1,1,2-Tetrachloro-2,2-difluoroethane 500 4,170 Propargyl alcohol 1 difluoroethane 500 4,170 A beta-Propiolactone 5 1,1,2,2-Tetrachloro-1,2-difluoroethane 5 35 Propyl alcohol 200 840 Tetrachloromethane, see Carbon tetrachloride n-Propyl intrate 25 110 S Tetrachloromethane, see Carbon tetrachloride			0.1	0.4			Sulfur pentafluoride	0.025	0.25
Phosphorus (yellow) 0.1 2,4,5T 10 Phosphorus pentachloride 1 Tantalum 5 Phosphorus pentasulfide 1 S TEDP 0.2 Phosphorus trichloride 0.5 3 Teflon® decomposition products (maintain minimal air concentration) 0.1 Picric acid 0.1 Tellurium (minimal air concentration) 0.1 Picric acid 0.1 Tellurium (minimal air concentration) 0.1 Plaster of Paris Inert dust S TEPP 0.05 Platinum, soluble salts (as Pt) 0.002 C Terphenyls 1 9 Polytetrafluoroethylene decomposition products, see Teflon® dec		Phosphine	0.3	0.4			Sulfuryl fluoride	5	20
Phosphorus pentachloride		Phosphoric acid		1			Systox, see Demeton®		
Phosphorus pentasulfide				0.1			2,4,5T		10
Phosphorus trichloride Phthalic anhydride Phthalic anhydride Pival® (2-pivalyl-1,3-indandione) Plaster of Paris Platinum, soluble salts (as Pt) Propane Inert dust Propane Inert gas Propargyl alcohol Propyl alcohol Propyl alcohol Propyl alcohol Propylene bichloride Propylene bichloride Propylene oxide Propyne, see Methyl acetylene Pyrethrum Pyridine Phosphorus trichloride 2 12 Tellurium Prol 1 Tellurium Prol 1 Tellurium Prol 2 Tellurium Propyls Tellurium Propyls Tellurium Prol 2 Tellurium Propyls Tellurium Propyls Tellurium Propyls Tellurium Prol 2 Tellurium Prol 2 Tellurium Prol 2 Tellurium Propyls Tellurium Prol 2 Tellurium Propyls Tellurium Prol 2 Tellurium Prellurium Prellurium Prellurium Prellurium Prol 3 Tellurium Prellurium Prellurium Prellurium Prellurium Prol 3 Tellurium Prellurium Prellurium Prellurium Prellurium Prol 3 Tellurium Prellurium Prellurium Prellurium Prellurium Prellurium Prellurium Prol 3 Tellurium Prellurium Pr		·		1					
Phthalic anhydride		Phosphorus pentasulfide		1	5	S			
Picric acid							·	(mainta	in
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A See R 325.60154(2). C See R 325.60154(2). S See R 325.60154(2). S See R 325.60154(2). nitramine) Thallium, soluble compounds (as Tl) 0.1									8
C See R 325.60154(2). S Thallium, soluble compounds (as Tl) 0.1		Pyridine	5	15	5	S			
S See R 325.60154(2). (as TI) 0.1						_			1.5
,		C See R 325.60154(2).			5	S			
Thiram 5		S See R 325.60154(2).					, ,		
							Ihiram		5

		M	AC			M.	AC
Subs	stance	ppm	mg/m³	Subs	stance	ppm	mg/m³
	Tin (inorganic compounds,				Tungsten and compounds (as W)		
	except SnH ₄ and SnO ₂)		2		Insoluble		5
	(organic compounds)		0.1		Soluble		1
	Tin oxide	Inert pa	articulate		Turpentine	100	560
	Titanium dioxide	Inert pa	articulate		Uranium (natural) soluble & insolu	ıble	
	Toluene (toluol)	200	750		compounds (as U)		0.2
С	Toluene-2,4-diisocyanate	0.02	0.14	С	Vanadium (V ₂ O ₅ dust)		0.5
S	o-Toluidine	5	22		(V ₂ O ₅ fume)		0.1
	Toxaphene, see Chlorinated car	mphene			Vinyl benzene, see Styrene		
	Tributyl phosphate	·	5	С	Vinyl chloride (see R 325.51401 e	t seq.*)
	1,1,1-Trichloroethane, see Meth	yl chloro	form		Vinyl cyanide, see Acrylonitrile		
S	1,1,2-Trichloroethane	10	45		Vinyl toluene	100	480
	Trichloroethylene	100	535		Warfarin		0.1
	Trichloromethane, see Chlorofor	rm			Xylene (xylol)	100	435
S	Trichloronaphthalene		5	S	Xylidine	5	25
	1,2,3-Trichloropropane	50	300		Yttrium		1
	1,1,2-Trichloro-1,2,2-trifluoro-				Zinc chloride fume		1
	ethane	1,000	7,600		Zinc oxide fume		5
	Triethylamine	25	100		Zirconium compounds (as Zr)		5
	Trifluoromonobromomethane	1,000	6,100		A See R 325.60154(2).		
	Trimethyl benzene	25	120		C See R 325.60154(2).		
	2,4,6-Trinitrophenol, see Picric a	acid			S See R 325.60154(2).		
	2,4,6-Trinitrophenylmethylnitram	ine, see	Tetryl	а	The 1970 ACGIH standard for Te	raethy	 lead is
S	Trinitrotoluene		1.5		0.100 mg/m ³ .		
	Triorthocresyl phosphate		0.1		5.155 mg/m :		
	Triphenyl phosphate		3	*	Cautionthese rules contain exter requirements for exposure to these		tances.

R 325.60161 Maximum allowable concentrations for mineral dusts.

Rule 11. Table 7. Mineral dusts

Substance	MAC (mppcf)
Silica	
Crystalline *	
Quartz	MAC = <u>250</u>
	% SiO ₂ +5
Cristobalite	MAC same as quartz
Cristopalite	MAC same as quartz
Amorphous, including natural diatomaceous earth	20
Silicates (less than 1% crystalline silica)	
Asbestos, all types (see asbestos in construction	
R 325.51301 et seq.)	
N.C.	00
Mica	20
Portland cement	50
Soapstone	20
Talc (non-asbestiform)	20
Taic (non-aspesinonn)	20
Talc (fibrous) (see asbestos in construction R 325.51301 et	
seq.)	
Tremolite (see asbestos in construction R 325.51301 et seq.)	
Graphite (natural)	15
Inert or nuisance particles **	50 of total dust less than 1% SiO ₂
	(or 15 mg/m ³ , whichever is the
	smaller)

- The percentage of crystalline silica, SiO₂, in the formula is the amount determined from airborne samples. The following are some examples of inert or nuisance particulates when toxic impurities are not present; e.g. quartz less than 1%.

Alundum (A1 ₂ 0 ₃)	Gypsum	Rouge
Calcium carbonate	Limestone	Silicon carbide
Cellulose	Magnesite	Starch
Corundum (A1 ₂ 0 ₃)	Marble	Sucrose
Emery	Pentaerythritol	Tin oxide
Glycerine mist	Plaster of Paris	Titanium dioxide
Graphite (synthetic)	Portland cement	Vegetable oil mists (except castor, cashew nut, or similar irritant oils)